

IN THE CLAIMS

1. (Currently Amended) A catheter system, comprising:

a first catheter element with at least a first active localizer corresponding to a portion of the first catheter element, the first active localizer indicating wherein a spatial position of the portion of the first catheter element the first active localizer can be determined; and

a second catheter element with at least a second active localizer corresponding to a portion of the second catheter element, the first active localizer indicating wherein a spatial position of the portion of the second catheter element, the second active localizer can be determined;

wherein the first and the second catheter element are slidably coupled, and

wherein the first and the second active localizers ~~are used~~ simultaneously indicate to determine the spatial positions of the portions of the first and second catheter elements ~~active localizers with respect to each other.~~

2. (Previously Presented) A catheter system as claimed in claim 1, wherein the first catheter element has a channel running in longitudinal direction, through which the second catheter element is guided.

3. (Previously Presented) A catheter system as claimed in claim 1, further comprising a fixing device for fixing a position of at least one of the catheter elements in a surrounding vessel.

4. (Previously Presented) A catheter system as claimed in claim 1, wherein at least one of the localizers is a magnetic field sensor in an external magnetic field for determining the spatial position.

5. (Currently Amended) A catheter system as claimed in claim 1, wherein at least one of the localizers contains a source for electromagnetic ~~and/or~~ or acoustic radiation.

6. (Previously Presented) A catheter system as claimed in claim 1, wherein the localizers are arranged at a distance of less than 10 cm from each other during use of the catheter system.

7. (Previously Presented) A method for navigation of a catheter system in a vascular system, wherein the catheter system contains a first and a second catheter element, which are coupled to each other such that they can slide with respect to each other and carry at least a first or second active localizer respectively, the method comprising the following steps of:

a) determining a spatial position of the first active localizer relative to the vascular system; and

b) determining a spatial position of the second active localizer relative to the spatial position of the first active localizer, wherein the determining steps are performed substantially simultaneously.

8. (Previously Presented) A method as claimed in claim 7, wherein the first catheter element is fixed relative to the vascular system, while the second catheter element is moved.

9. (Previously Presented) A method as claimed in claim 7, wherein the spatial position of the first active localizer relative to the vascular system is determined based on an image of the vascular system.

10. (Cancelled)

11. (Previously Presented) A catheter system as claimed in claim 1, wherein the localizers are arranged at a distance of less than 5 cm from each other during use of the catheter system.